
National Aeronautics and Space Administration
NASA
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SPACE LAUNCH SYSTEM
BUILDING THE FUTURE OF SPACE EXPLORATION
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Space Launch System Program
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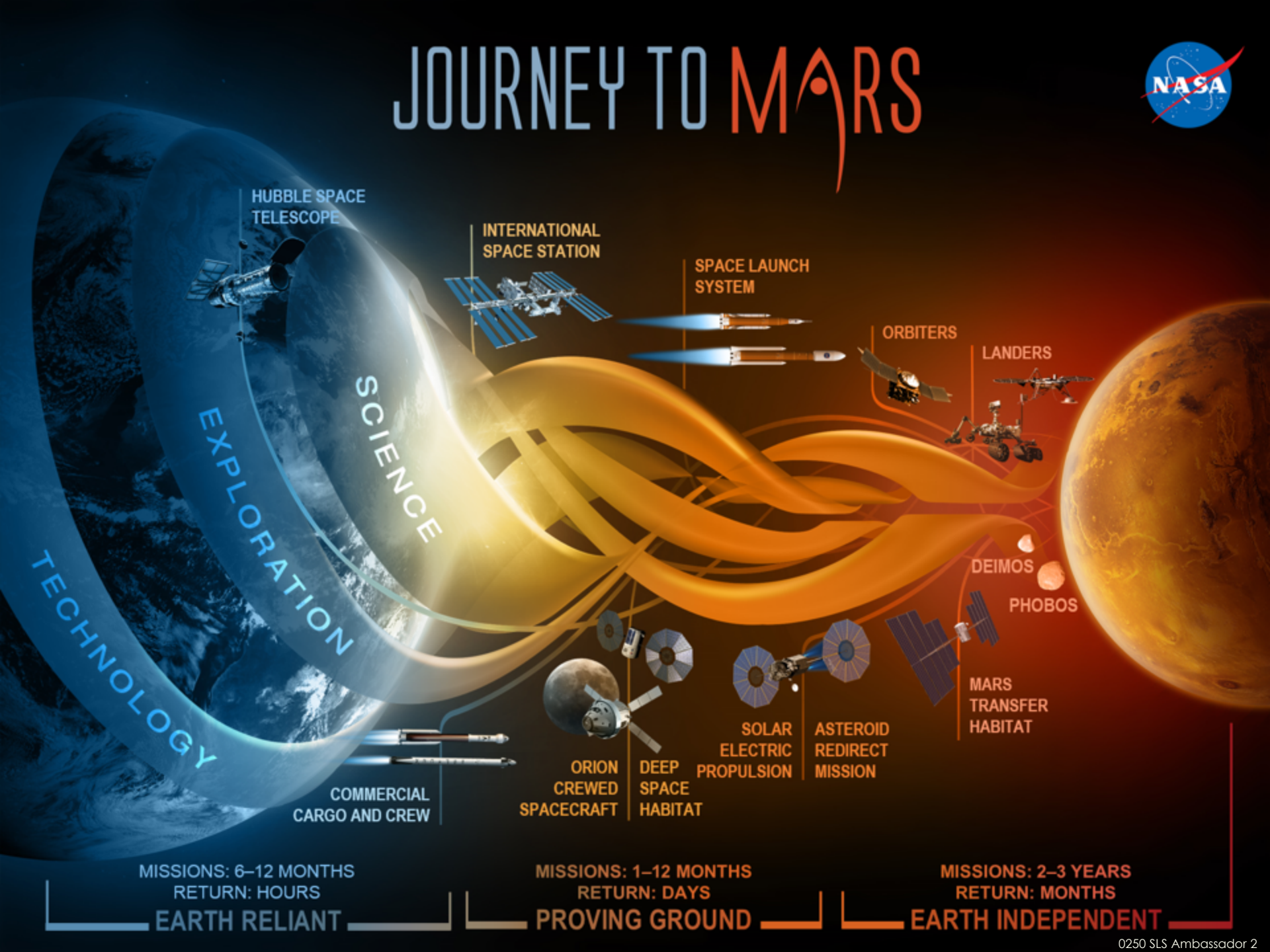
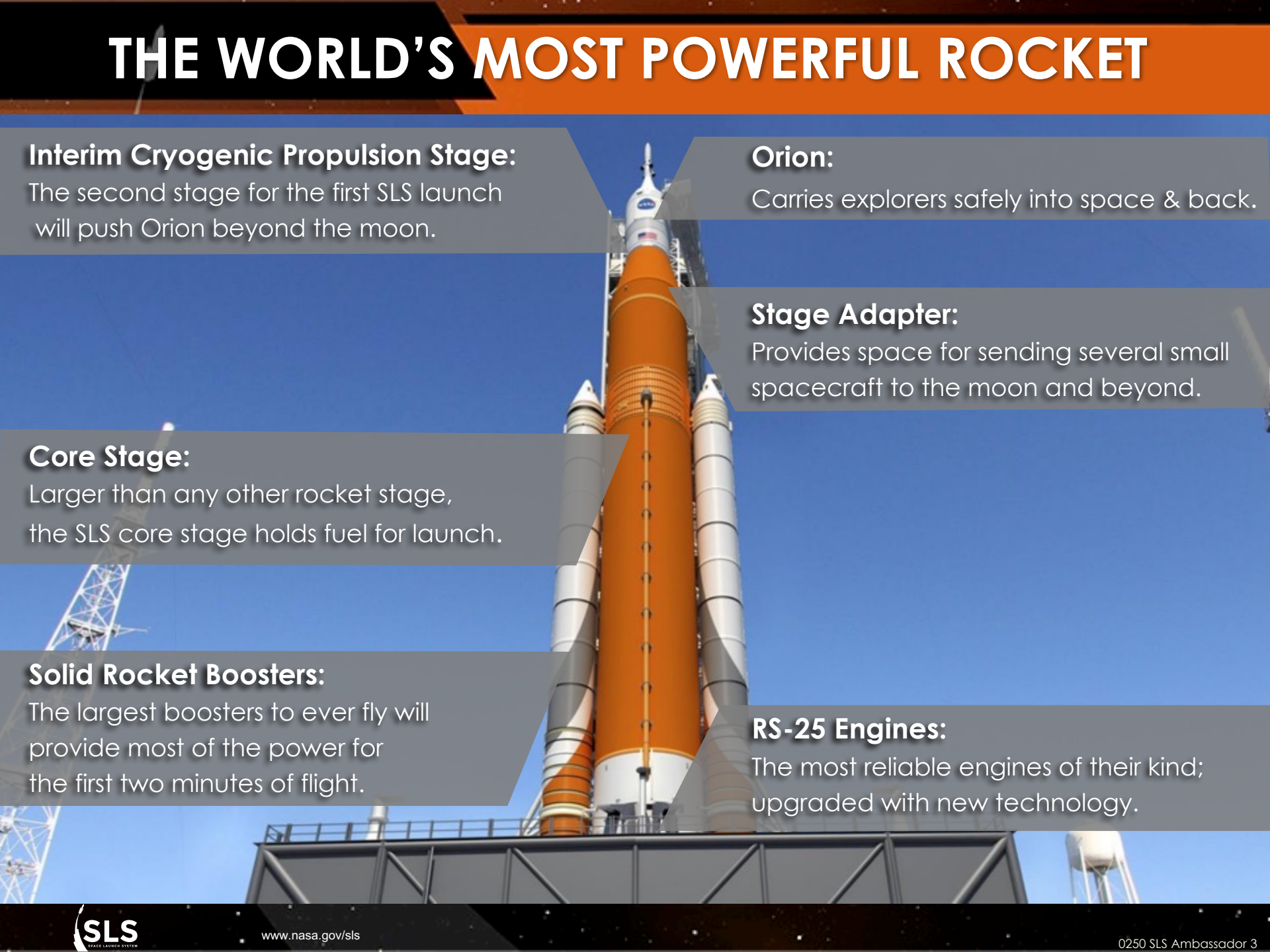
www.nasa.gov/sls
SLS
SPACE LAUNCH SYSTEM

JOURNEY TO MARS



THE WORLD'S MOST POWERFUL ROCKET



Interim Cryogenic Propulsion Stage:
The second stage for the first SLS launch will push Orion beyond the moon.

Orion:
Carries explorers safely into space & back.

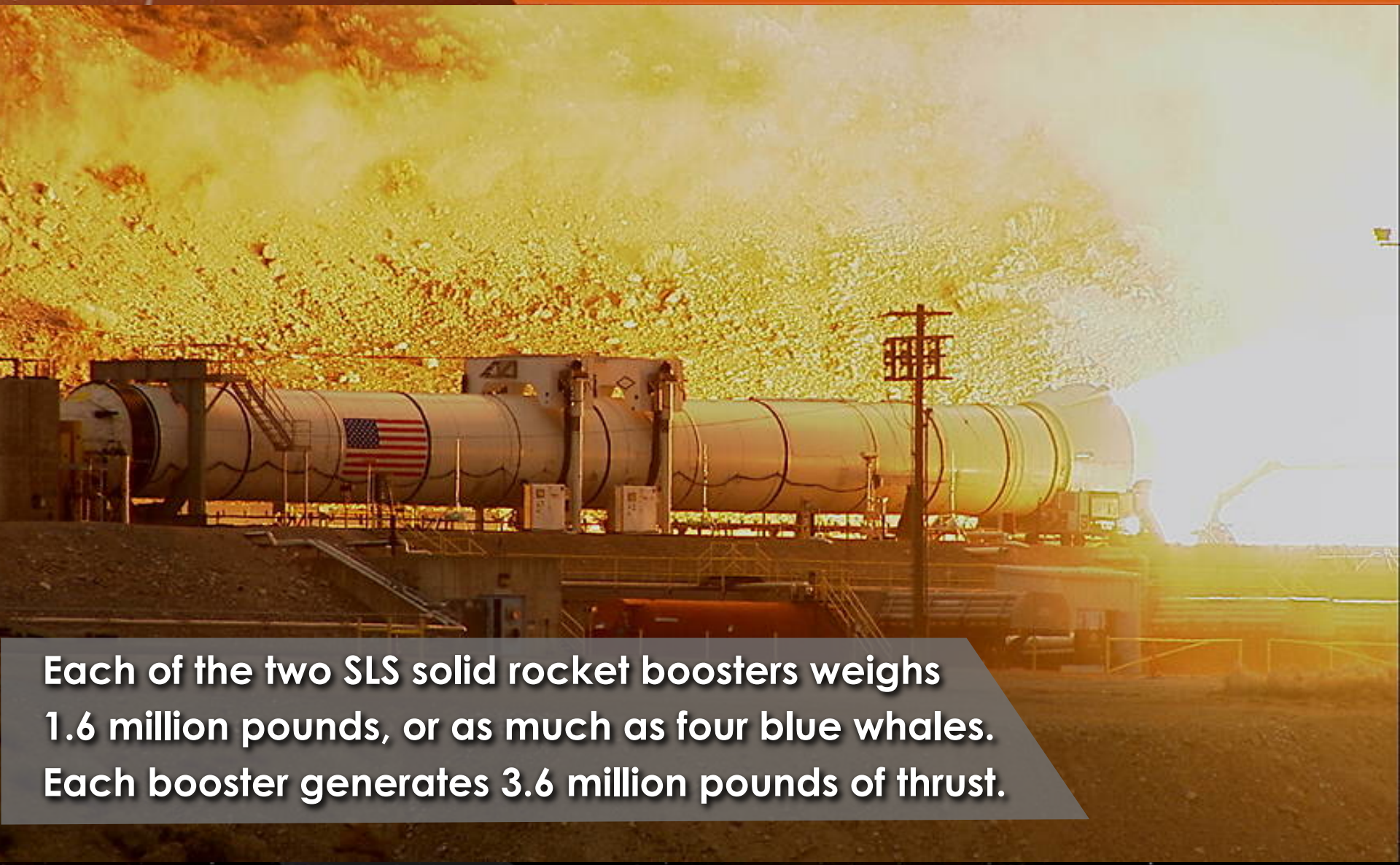
Stage Adapter:
Provides space for sending several small spacecraft to the moon and beyond.

Core Stage:
Larger than any other rocket stage, the SLS core stage holds fuel for launch.

Solid Rocket Boosters:
The largest boosters to ever fly will provide most of the power for the first two minutes of flight.

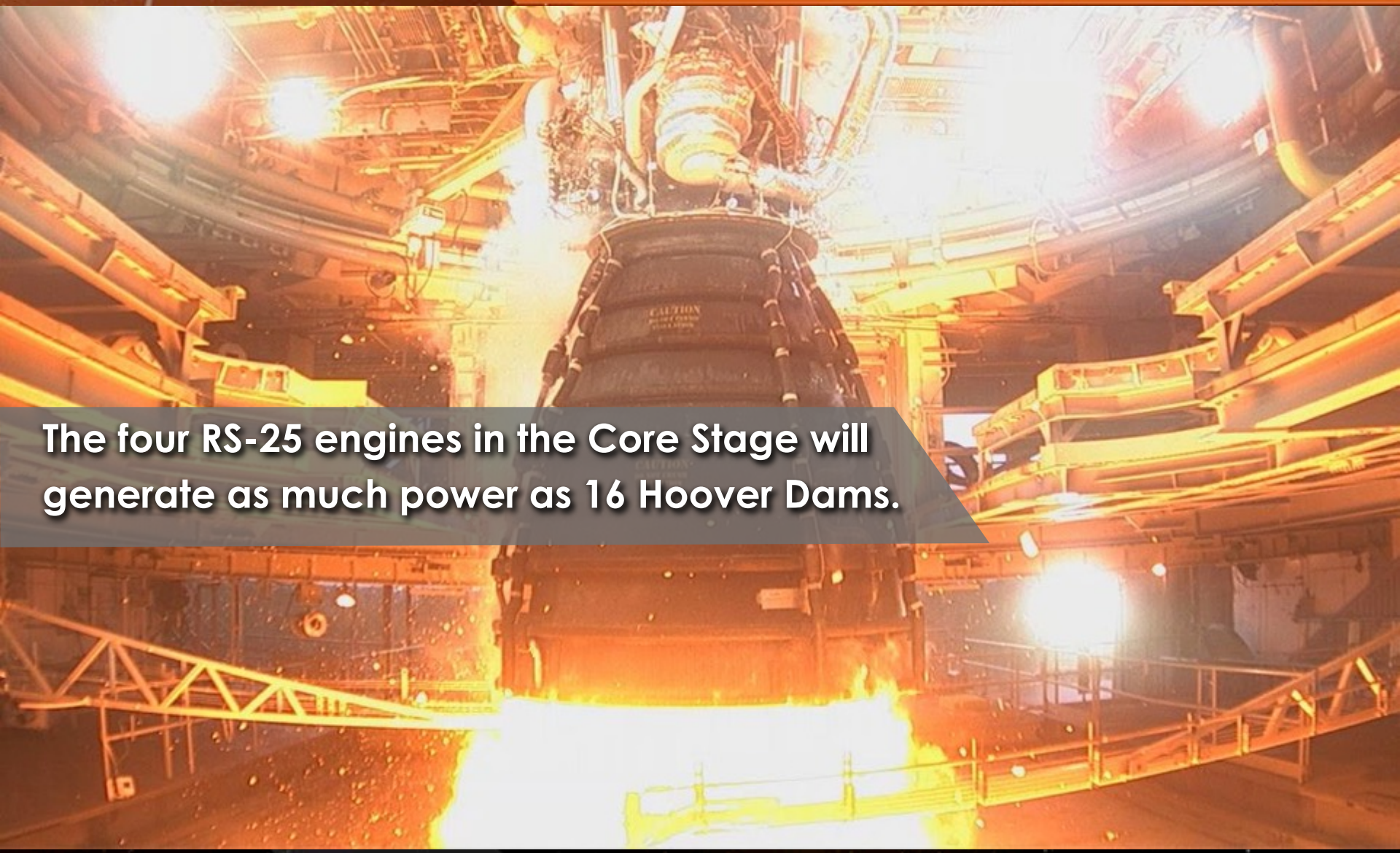
RS-25 Engines:
The most reliable engines of their kind; upgraded with new technology.

BUILDING A BIGGER, BETTER BOOSTER

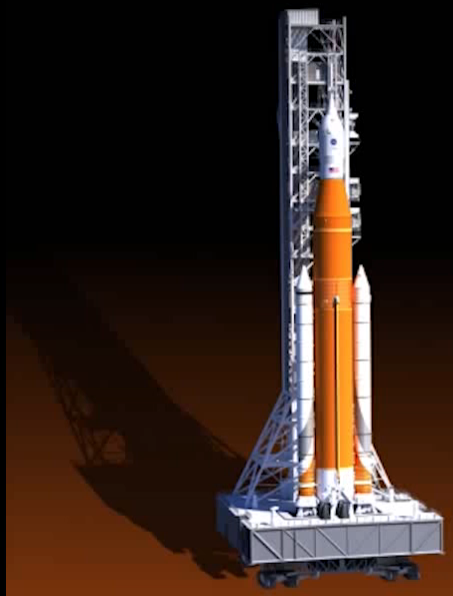


Each of the two SLS solid rocket boosters weighs 1.6 million pounds, or as much as four blue whales. Each booster generates 3.6 million pounds of thrust.

DESIGNED FOR PERFORMANCE



The four RS-25 engines in the Core Stage will generate as much power as 16 Hoover Dams.



Space Launch System

FUELING THE FLAMES

Using the world's largest welding tool, the 200-foot-tall Core Stage is in production today. It will carry 2 million pounds of propellant.

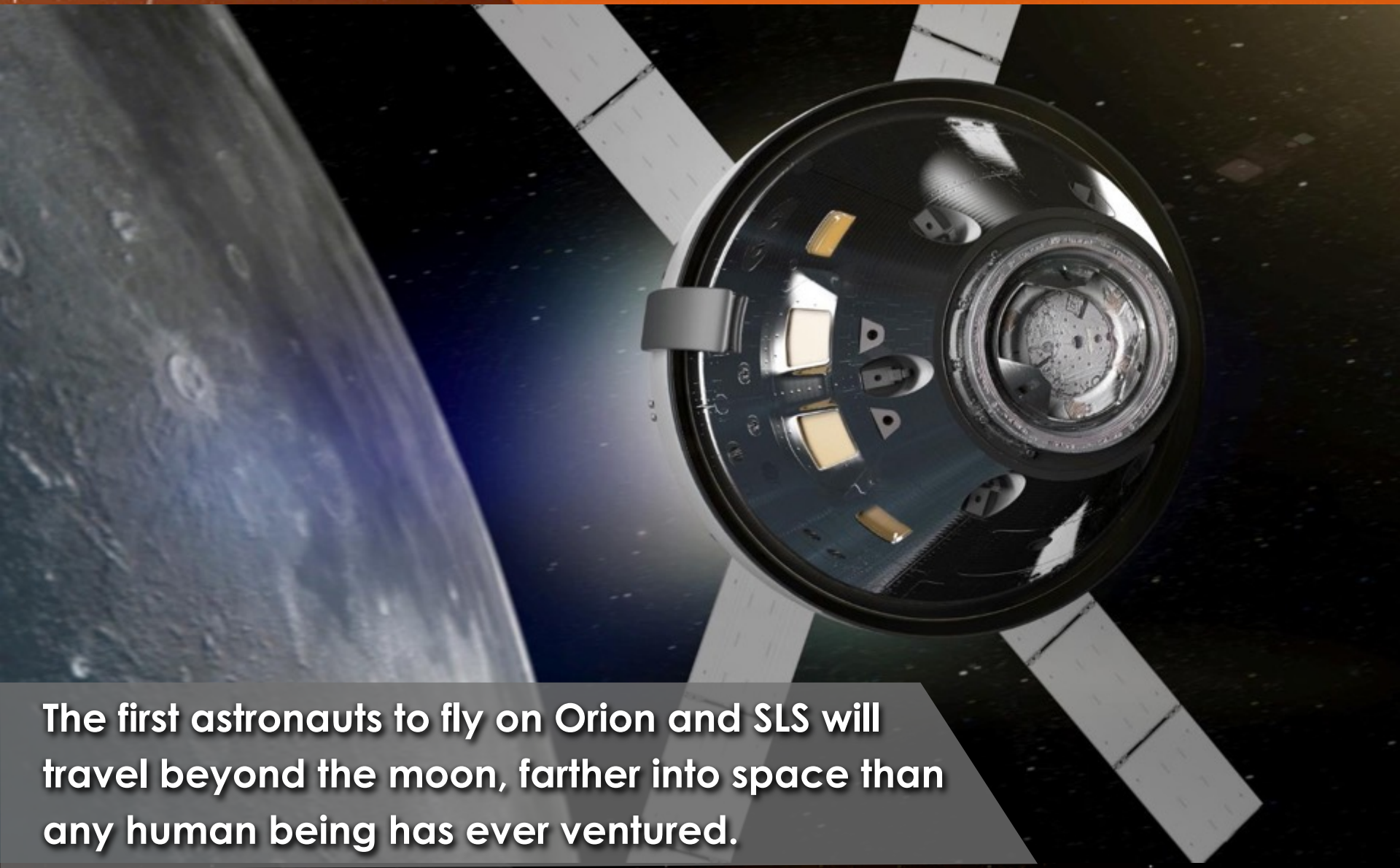
EM-1 SECOND STAGE

The LVSA, ICPS and OSA are being integrated with Orion and Core Stage simulators; the entire "stack" will undergo structural testing.

ADVANCING THE STATE OF THE ART

Investments in new technologies will keep SLS state-of-the-art as it upgrades to greater power, and will have benefits outside NASA.

RETURNING TO DEEP SPACE



The first astronauts to fly on Orion and SLS will travel beyond the moon, farther into space than any human being has ever ventured.

MAKING THE IMPOSSIBLE POSSIBLE

Not only will SLS enable human exploration of deep space, it will make possible science missions and other payloads no other rocket can fly.

THE ADVENTURE BEGINS NOW.

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